Abstract

~~**High-pressure pump piston/cylinder unit**~~

~~In order to preclude the risk of wear as a result of axial offset to the piston (2) which is guided in the pump cylinder (3), in a~~ A high-pressure pump piston/cylinder unit~~, in which~~ includes a pump cylinder ~~(3)~~ having a piston ~~(2)~~ which oscillates therein ~~is~~ provided in a housing ~~(1), the~~. The piston ~~(2) being operatively~~ is connected ~~on one end side~~ to a controlled drive ~~(4), in order~~ to vary a suction and compression stroke volume ~~on the other end side, the head region, in~~ of the pump cylinder ~~(3), with the result that the~~. The pressure of the fluid ~~which is sucked~~ drawn into the pump cylinder ~~(3) from a conveying flow inlet (9)~~ is increased by the stroke of the piston ~~(2), in order~~ to make it available to a further supply element ~~by means of~~ through a conveying valve ~~(8), there is provision for a~~. A centering cone ~~(20)~~ in the form of a straight truncated cone having a circular base area ~~(D)~~ and top area ~~(d) to be~~ is formed integrally on the pump piston ~~(2) on the head region, the~~ a maximum half diameter reduction ~~(1/2 x [D-d])~~ of ~~said~~ the centering cone ~~(20)~~ with respect to the diameter ~~(D)~~ of the piston skirt ~~(2)~~ being in a ratio of approximately 1:200, and ~~the~~ an axial length ~~(l)~~ of ~~said~~ the centering cone ~~(20)~~ being designed in relation to the axial length ~~(L)~~ of the entire piston skirt ~~(2)~~ in a ratio ~~(l:L)~~ of approximately 1:6.6.